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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,062	02/11/2004	Anthony Vetro	MERL-1510	2109

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EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,062	Applicant(s) VETRO ET AL.	
	Examiner Chikaodili E. Anyikire	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11 is/are rejected.
- 7) ☒ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20040615</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is responsive to application number (10776062) filed on February 11, 2004. Claims 1-11 are pending and have been examined.

Information Disclosure Statement

2. Acknowledgement is made of applicant's information disclosure statement.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The present invention is not any of the four proper types of statutory categories: machine, manufacture, composition of matter, and process.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 and 11 rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al (US 6,339,450).

As per claim 1, Chang et al disclose a model stored in a memory describing a transcoded video, comprising:

a first rate-distortion function modeling a requantization of an input video corresponding to the transcoding video (Fig 3, 46; Col 4 Ln 12-16);

a second-rate distortion function modeling a resynchronization marker insertion rate for the transcoded video (Fig 3, 42; Spatial Resilience; Col 3 Ln 20-31 and Col 4 Ln 17-42); and

a third rate-distortion function modeling an intra-block insertion rate for the transcoded video (Fig 3, 42; Temporal Resilience; Col 3 Ln 20-25 and Ln 31-38).

As per claim 2, Chang et al disclose the model of claim 1, further comprising:

a bit allocation control module (Fig 1, 16) configured to receive the input video and allocating bits to the transcoded video according to outputs of the first, second, and third models (Col 4 Ln 12-16; Col 10 Ln 26 – Col 11 Ln 35).

As per claim 3, Chang et al disclose the model of claim 1, in which the first function outputs a quantization parameter (Fig 3, 46; Col 4 Ln 12-16), the second function outputs the resynchronization marker insertion rate (Col 3 Ln 20-31 and Col 4 Ln 17-42), and the third function outputs the intra-block insertion rate (Col 3 Ln 20-25 and Ln 31-38).

As per claim 4, Chang et al disclose the model of claim 1, in which inter-frame dependencies in the transcoded video are due to a requantization distortion in a current frame of the transcoded video that is propagated to a next frame of the transcoded video through motion compensation, and further comprising: the first model is modified for the next frame to account for propagating the requantizing distortion (Col 6 Ln 30-67).

As per claim 5, Chang et al disclose the model of claim 4, in which the input video has a first bit rate greater than a second bit rate of the transcoded video (Fig 3, 44; Col 4 Ln 5-16).

As per claim 11, Chang et al disclose the model of claim 1, in which the bits allocated for inserting the resynchronization markers is determined from a number of bits in a resynchronization header and a resynchronization marker spacing (Col 3 Ln 20-31 and Col 4 Ln 17-42), and the bits allocated for inserting the intra-blocks is determined from an intra-block insertion rate and an average rate increase by replacing inter-coded block with intra-blocks (Abstract Ln 5-7; Col 3 Ln 31-37 and Col 11 53- Col 12 Ln 27; the prior art teaches that it adds I-frame (I-blocks), but also teaches maintain the bit-rate by removing other blocks, which would be P-frame (p-blocks)).

Allowable Subject Matter

6. Claims 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272 - 7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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CEA

Mehrdad Dastouri

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SUPERVISORY PATENT EXAMINER

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